IN THE CLAIMS:

1. 1. – 5. (Cancelled)

1. 6. (Currently Amended) A method of claiming ownership of a disk by a network device
2. in a network storage system comprising the steps of:
3. writing ownership information to a predetermined area of the disk; and
4. setting a small computer system interface ~~persistent~~ reservation tag for the disk to
5. a state of network device ownership to provide a two part indicia of ownership for the
6. disk, where the two part indicia of ownership are both written to the disk.

1. 7. (Original) The method of claim 6 wherein the ownership information further com-
2. prises a serial number of a network device.

1. 8. (Original) The method of claim 6, wherein the network device comprises a file server.

1. 9. (Currently Amended) A network storage system comprising:
2. a plurality of network devices;
3. one or more switches, each network device connected to at least one of the one or
4. more switch; and
5. a plurality of disks having a first ownership attribute written to a predetermined
6. area of ~~the~~ each disk and a second ownership attribute in the form of a small computer
7. system interface ~~persistent~~ reservation tag, wherein the first and second ownership attrib-
8. ute are written to each disk, each disk connected to at least one of the plurality of
9. switches.

1. 10. (Cancelled)

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1   11. (Currently Amended) The network storage system of claim 9, wherein the small

2   computer system interface ~~persistent~~ reservation tag is a small computer system interface

3   level 3 persistent reservation tag.

1   12. (Currently Amended) The networked storage system of claim 9, wherein the small

2   computer system interface ~~3 persistent~~ reservation tag is set such that only the network

3   device may write to the disk.

1   13. (Previously Presented) The network storage system of claim 9, wherein the first

2   ownership attribute further comprises a serial number of the network device that owns

3   that particular disk.

1   14. (Previously Presented) The network storage system of claim 9, wherein each of the

2   plurality of file servers can read data from each of the plurality of disks.

1   15. (Previously Presented) The network storage system of claim 9, wherein only a net-

2   work device that owns one of the plurality of disks can write data to the one disk.

3   16. (Original) The network storage system of claim 9, wherein the network devices com-

4   prise file servers.

1   17. (Currently Amended) A network storage system comprising:

2   one or more switches;

3   a plurality of disks; and

4   means for writing ownership information to a predetermined area of ~~a~~ each disk

5   of the plurality of disks; and

3

6   means for setting a small computer system interface ~~level 3 persistent~~ reservation

7   tag of ~~a~~ <u>each</u> disk to provide a two part indicia of ownership<u>, where the two part indicia</u>

8   <u>of ownership are written to each disk.</u>

1   18. (Cancelled)

1   19. (Original) The network storage system of claim 17, wherein the network devices

2   comprise file servers.

1   20. (Currently Amended) A network storage system comprising:

2   one or more switches interconnected to form a switching fabric;

3   a plurality of disks, each of the disks connected to at least one of the switches,

4   each disk storing a first ownership attribute to a predetermined area of a disk and

5   each disk associated with a second ownership attribute in the form of a small

6   computer system interface ~~persistent~~ reservation; and

7   one or more network devices, interconnected with the switching fabric, each of

8   the network devices being adapted to own a predetermined set of disks of the plurality of

9   disks through use of the first and second ownership attributes.

1   21. (Cancelled)

1   22. (Cancelled)

1   23. (Previously Presented) The network storage system of claim 20, wherein the first

2   ownership attribute further comprises a serial number of one of the one or more network

3   devices.

1   24. (Currently Amended) The network storage system of claim 20, wherein the small

2   computer system interface ~~persistent~~ reservation is a small computer system interface

3   level 3 persistent reservation.

1   25. (Original) The network storage system of claim 20, wherein each of the network de-

2   vices further comprises a disk ownership table, the disk ownership table containing own-

3   ership data for each of the disks.

1   26. (Original) The network storage system of claim 25, wherein the ownership table fur-

2   ther comprises a world wide name for each of the disks, the world wide name being used

3   for identification of each of the disks.

1   27. (Currently Amended) A computer-readable medium, including program instructions

2   executing on network device, for performing the steps of:

3   writing ownership information to a predetermined area of a disk; and

4   setting a small computer system interface ~~persistent~~ reservation tag <u>for the disk</u> to

5   a state of network device ownership to provide a two part indicia of ownership <u>for the</u>

6   <u>disk, where the two part indicia of ownership are both written to the disk</u>.

1   28. (Currently Amended) A method for a network device to manage ownership of one

2   or more storage devices in a network storage system, comprising the steps of:

3   reading ownership information from a predetermined area of each storage device;

4   in response to reading the ownership information, creating an ownership table that

5   identifies the one or more storage devices owned by the network device;

6   reading a small computer system interface (SCSI) ~~level 3 persistent~~ reservation

7   tag from each storage device;

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8   comparing the SCSI ~~level 3 persistent~~ reservation tag to the ownership informa-

9   tion of the same storage device and, if there is not a match, changing the SCSI ~~level 3~~

10   ~~persistent~~ reservation tag to match the ownership information; and

11   configuring the one or more storage devices identified in the ownership table into

12   at least one volume for use by the network device.

1   29. (Previously Presented) The method of claim 28 further comprising:

2   setting ownership information at the predetermined area of each storage device.

1   30. (Previously Presented) The method of claim 28 wherein the step of configuring fur-

2   ther comprises:

3   organizing the one or more storage devices into at least one Redundant Array of

4   Independent Disks (RAID) group.

1   31. (Previously Presented) The method of claim 28 further comprising:

2   wherein the predetermined area of the one or more storage devices is sector zero

3   of the one or more storage devices.

1   32. (Previously Presented) The method of claim 28 further comprising:

2   wherein the ownership information is a serial number of the network device that

3   owns that particular storage device.

1   33. (Previously Presented) The method of claim 28 further comprising:

2   wherein the ownership table includes a world wide name for each of the storage

3   devices, the world wide name being used to identify each of the storage devices.

1   34. (Currently Amended) A network device for managing ownership of one or more

2   storage devices in a network storage system, comprising the steps of:

3   means for reading ownership information from a predetermined area of each stor-

4 age device;

5   in response to reading the ownership information, means for creating an owner-

6 ship table that identifies the one or more storage devices owned by the network device;

7   means for reading a small computer system interface (SCSI) ~~level 3 persistent~~ res-

8 ervation tag from each storage device;

9   means for comparing the SCSI ~~level 3 persistent~~ reservation tag to the ownership

10 information of the same storage device and, if there is not a match, changing the SCSI

11 ~~level 3 persistent~~ reservation tag to match the ownership information; and

12   means for configuring the one or more storage devices identified in the ownership

13 table into at least one volume for use by the network device.

1 35. (Currently Amended) A computer readable medium containing executable program

2 instructions for managing ownership of one or more storage devices in a network storage

3 system, the executable program instructions comprising program instructions for:

4   reading ownership information from a predetermined area of each storage device;

5   in response to reading the ownership information, creating an ownership table that

6 identifies the one or more storage devices owned by the network device;

7   reading a small computer system interface (SCSI) ~~level 3 persistent~~ reservation

8 tag from each storage device;

9   comparing the SCSI ~~level 3 persistent~~ reservation tag to the ownership informa-

10 tion of the same storage device and, if there is not a match, changing the SCSI ~~level 3~~

11 ~~persistent~~ reservation tag to match the ownership information; and

12   configuring the one or more storage devices identified in the ownership table into

13 at least one volume for use by the network device.

1 36. (Currently Amended) A network storage system, comprising:

2 one or more storage devices, each storage device having a predetermined area for

3 storing ownership information and each storage device having a small computer system

4 interface (SCSI) ~~level 3 persistent~~ reservation tag;

5 at least one network device having an ownership table constructed based upon

6 the ownership information from each storage device;

7 the at least one network device having an ownership layer for comparing the SCSI

8 ~~level 3 persistent~~ reservation tag to the ownership information of the same storage device

9 and, if there is not a match, changing the SCSI ~~level 3 persistent~~ reservation tag to match

10 the ownership information; and

11 the at least one network device having a disk storage layer for configuring the one

12 or more storage devices identified in the ownership table into at least one volume for use

13 by the network device.

1 37. (Previously Presented) The network storage system of claim 36 further comprising:

2 the ownership layer adapted to set ownership information at the predetermined

3 area of each storage device.

1 38. (Previously Presented) The network storage system of claim 36 further comprising:

2 the disk storage layer organizing the one or more storage devices into at least one

3 Redundant Array of Independent Disks (RAID) group.

1 39. (Previously Presented) The network storage system of claim 36 further comprising:

2 wherein the predetermined area of the one or more storage devices is sector zero

3 of the one or more storage devices.

1 40. (Previously Presented) The network storage system of claim 36 further comprising:

2 wherein the ownership information is a serial number of the network device that

3 owns that particular storage device.

1   41. (Previously Presented) The network storage system of claim 36 further comprising:

2   wherein the ownership table includes a world wide name for each of the storage

3   devices, the world wide name being used to identify each of the storage devices.

1   42. (Currently Amended) The method of claim 6 wherein the small computer system in-

2   terface ~~persistent~~ reservation tag and the ownership information at the predetermined area

3   of the disk indicate ownership by the same network device.

1   43. (Currently Amended) The method of claim 6 wherein the small computer system

2   interface ~~persistent~~ reservation tag is a small computer system interface level 3 persistent

3   reservation tag.

1   44. (Currently Amended) A method for a network device to manage ownership of one

2   or more storage devices in a network storage system, comprising the steps of:

1   reading ownership information from a predetermined area of each storage device;

2   accessing a small computer system interface (SCSI) ~~persistent~~ reservation tag as-

3   sociate with each storage device;

4   comparing the SCSI ~~persistent~~ reservation tag to the ownership information of the

5   same storage device and, if there is not a match, changing the SCSI ~~persistent~~ reservation

6   tag to match the ownership information; and

7   configuring the one or more storage devices for use by the network device.

1   45. (Currently Amended) The method of claim 44 wherein the small computer system

2   interface (SCSI) ~~persistent~~ reservation tag is a small computer system interface level 3

3   (SCSI-3) persistent reservation tag.

1   46. (Previously Presented) The method of claim 44 further comprising:

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1   in response to reading the ownership information, creating an ownership table on

2   the network device that identifies the one or more storage devices owned by the network

3   device; and

4   using the ownership table to configure the one or more storage devices into at

5   least one volume.

1   47. (Previously Presented) The method of claim 44 further comprising:

2   setting ownership information at the predetermined area of each storage device.

1   48. (Previously Presented) The method of claim 44 further comprising:

2   wherein the predetermined area of the one or more storage devices is sector zero

3   of the one or more storage devices.

1   49. (Currently Amended) A network storage system, comprising:

2   means for reading ownership information from a predetermined area of each stor-

3   age device;

4   means for accessing a small computer system interface (SCSI) ~~persistent~~ reserva-

5   tion tag associate with each storage device;

6   means for comparing the SCSI ~~persistent~~ reservation tag to the ownership infor-

7   mation of the same storage device and, if there is not a match, changing the SCSI ~~persis-~~

8   ~~tent~~ reservation tag to match the ownership information; and

9   means for configuring the one or more storage devices for use by the network de-

10   vice.

1   50. (Currently Amended) A computer readable medium containing executable program

2   instructions for manage ownership of one or more storage devices, the executable pro-

3   gram instructions comprising program instructions for:

4   reading ownership information from a predetermined area of each storage device;

5   accessing a small computer system interface (SCSI) ~~persistent~~ reservation tag as-

6   sociate with each storage device;

7   comparing the SCSI ~~persistent~~ reservation tag to the ownership information of the

8   same storage device and, if there is not a match, changing the SCSI ~~persistent~~ reservation

9   tag to match the ownership information; and

10   configuring the one or more storage devices for use by the network device.

1   51. (Currently Amended) A network storage system comprising:

2   a plurality of disks having a first ownership attribute written to a known and con-

3   stant location across all the disks and a second ownership attribute in the form of a small

4   computer system interface <u>(SCSI)</u> ~~persistent~~ reservation tag to provide a two part indicia

5   of ownership<u>; and</u>

6   <u>   a network device with an ownership layer for comparing the SCSI persistent res-</u>

7   <u>ervation tag to the ownership information stored in the known and constant location of</u>

8   <u>the same storage device and, if there is not a match, changing the SCSI persistent reserva-</u>

9   <u>tion tag to match the ownership information stored in the known and constant location.</u>

1   52. (Currently Amended) A method for a network device to manage ownership of one or

2   more storage devices in a network storage system, comprising the steps of:

1   reading ownership information of each storage device from a known and constant

2   location across all storage devices;

3   accessing a small computer system interface (SCSI) ~~persistent~~ reservation tag as-

4   sociate with each storage device; and

5   comparing the SCSI ~~persistent~~ reservation tag to the ownership information of the

6   same storage device and, if there is not a match, changing the SCSI persistent reservation

7   tag to match the ownership information<u> stored on the storage device in the known and</u>

8   <u>constant location.</u>

PATENTS
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Please add new claim 53

1   53. (New) A method, comprising:

2   writing ownership information to a predetermined area of the disk to claim write

3   ownership by a first server;

4   setting a small computer system interface (SCSI) reservation tag to a state of the

5   first server ownership to provide a two part indicia of ownership for the first server; and

6   determining, by a second server, the disk is owned by the first server by reading

7   the ownership information in the predetermined area of the disk.